

FIG. 1A
(PRIOR ART)

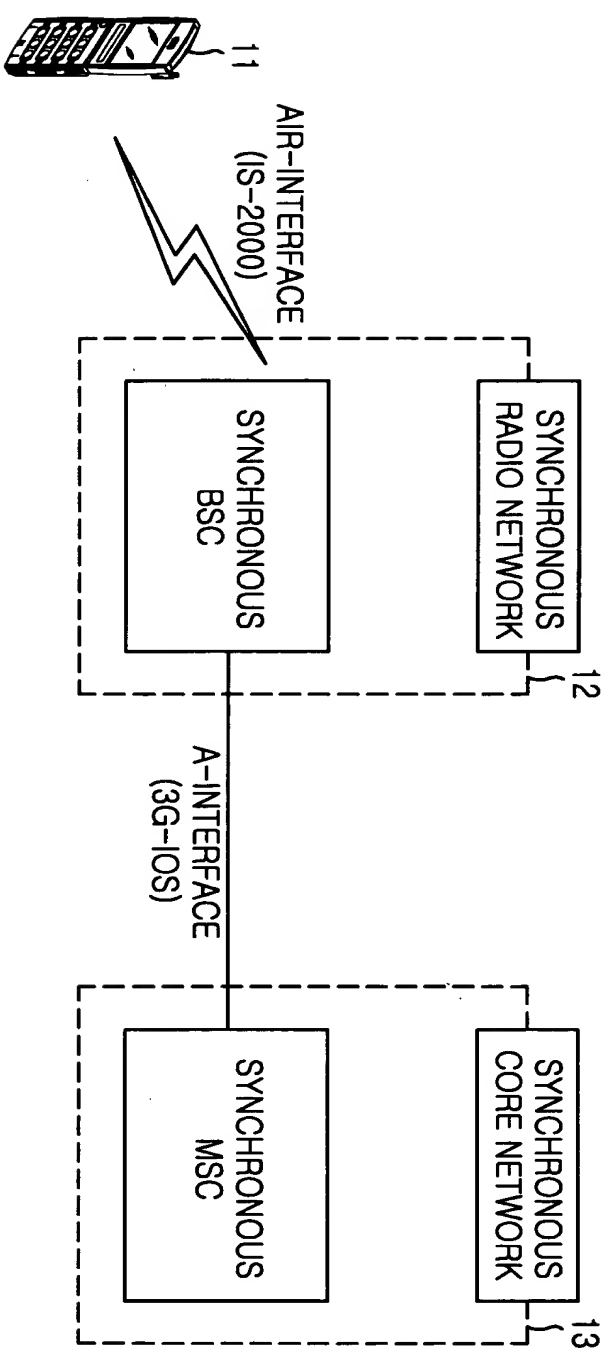


FIG. 1A is a block diagram of a prior art mobile communication system.

FIG. 1B
(PRIOR ART)

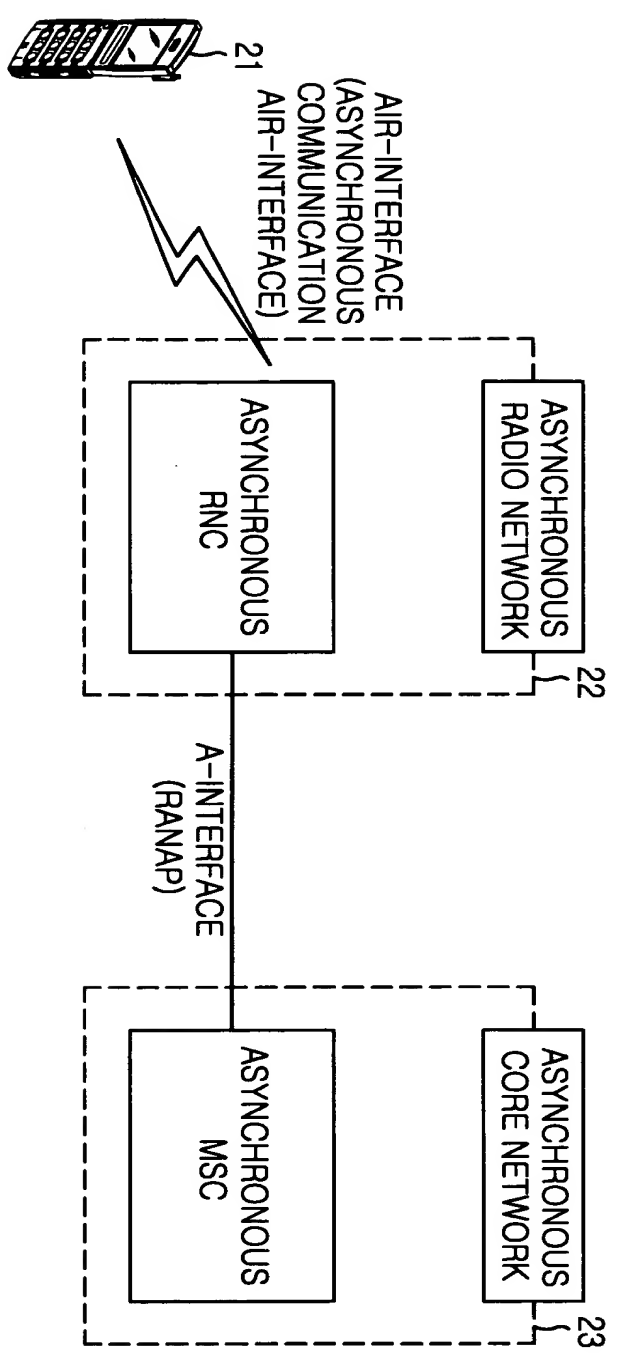


FIG. 1B is a block diagram of a prior art asynchronous communication system. A mobile device (21) is shown at the top, connected via a lightning bolt symbol to a dashed box labeled 22. This dashed box contains two blocks: "ASYNCHRONOUS RADIO NETWORK" and "ASYNCHRONOUS RNC". A line connects the "ASYNCHRONOUS RNC" block to another dashed box labeled 23. This dashed box contains two blocks: "ASYNCHRONOUS CORE NETWORK" and "ASYNCHRONOUS MSC". A line connects the "ASYNCHRONOUS MSC" block back to the "ASYNCHRONOUS RNC" block. The connection between the two dashed boxes is labeled "A-INTERFACE (RANAP)".

FIG. 2A
(PRIOR ART)

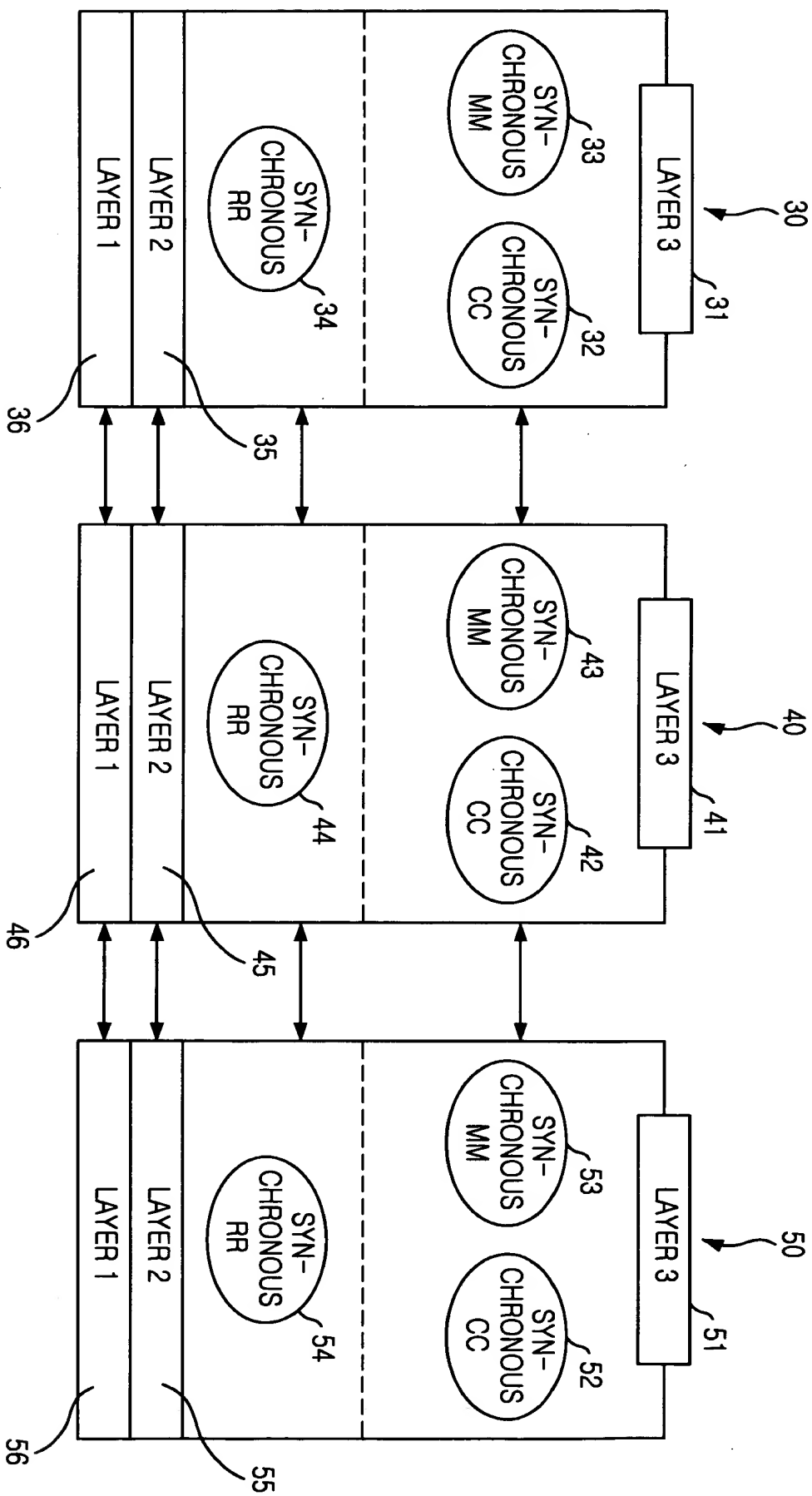


FIG. 2B
(PRIOR ART)

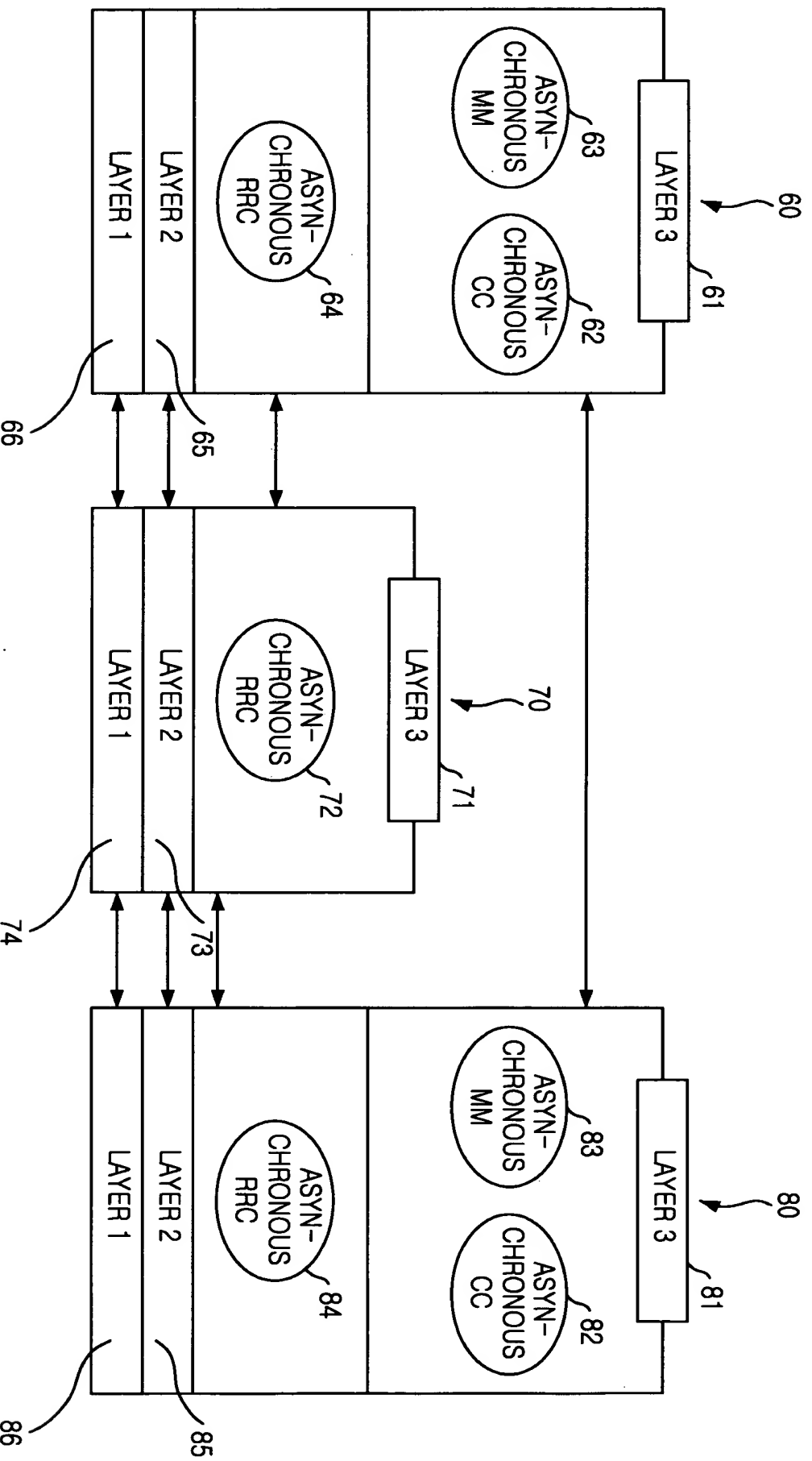


FIG. 2B is a block diagram of a system architecture (60) according to one embodiment of the present invention. The system architecture (60) includes a main block (61) and a sub-block (66). The main block (61) includes a layer (61) and two asynchronous-chronous components (62, 63). The sub-block (66) includes three layers (66, 66, 66). Bidirectional arrows (65, 66, 66) connect the main block (61) to the sub-block (66) at three points.

FIG. 3A

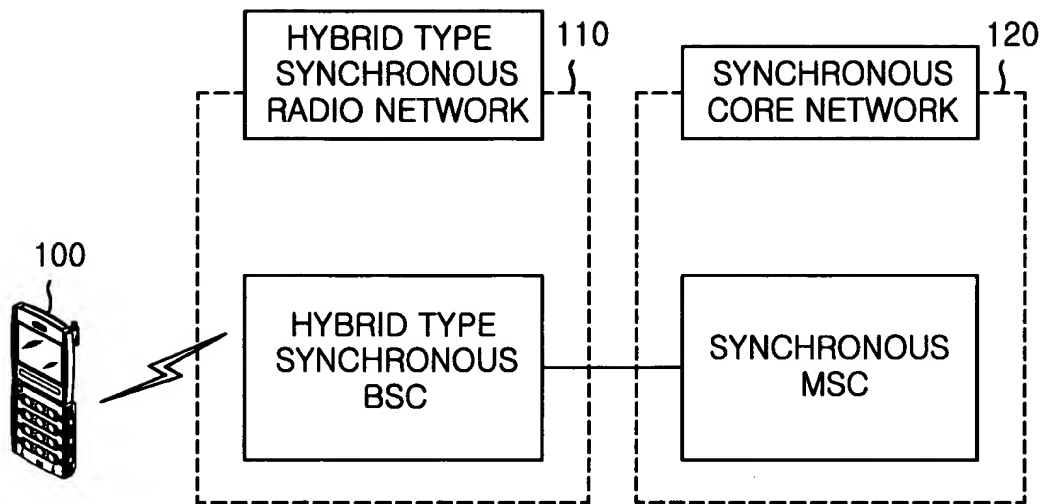


FIG. 3B

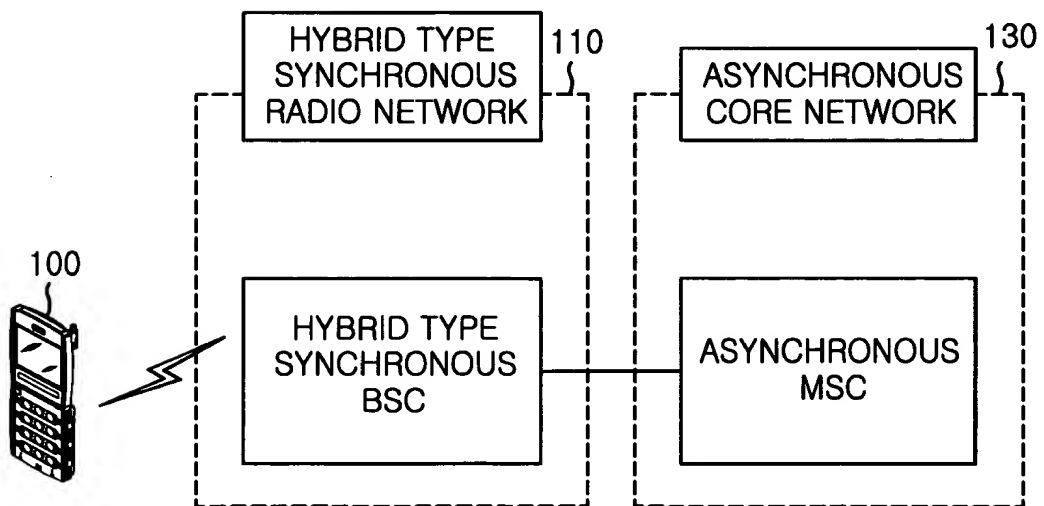


FIG. 3C

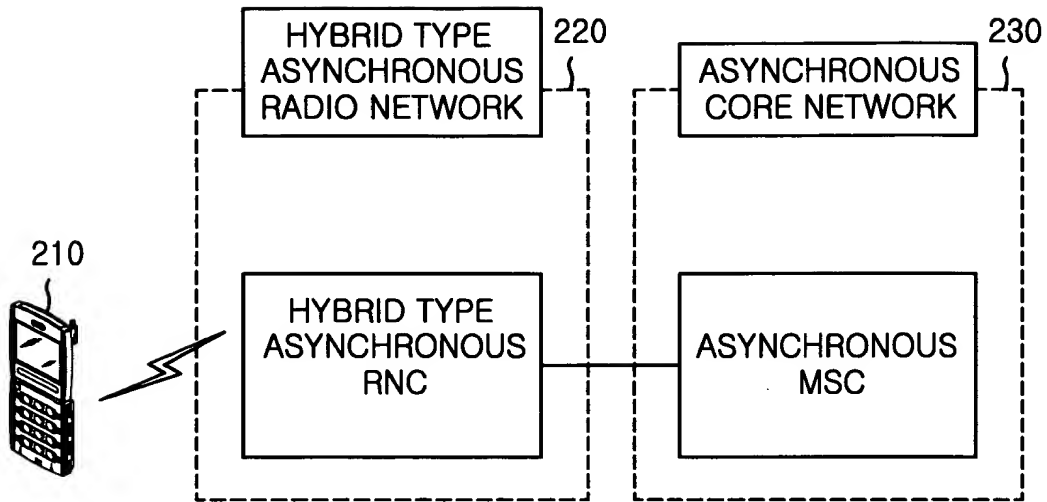


FIG. 3D

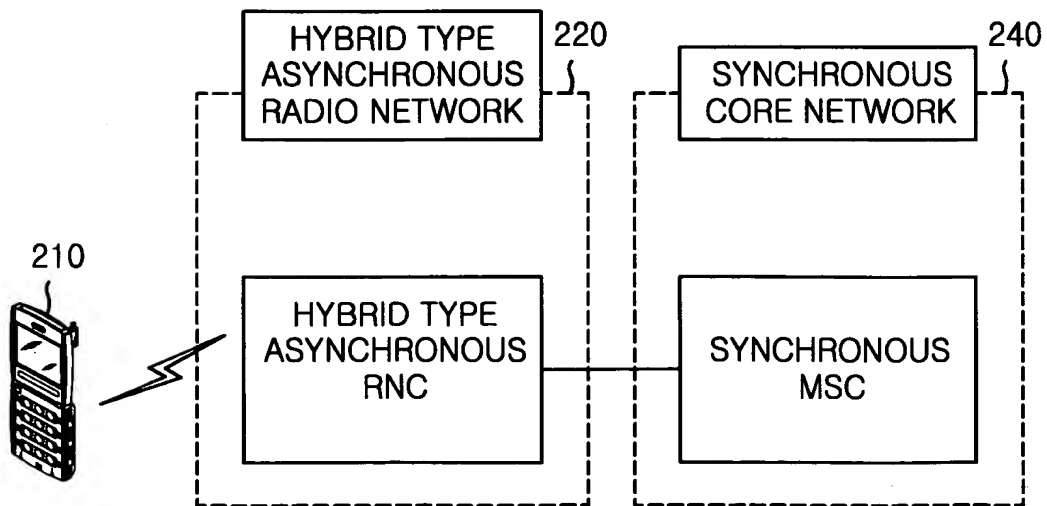


FIG. 4A

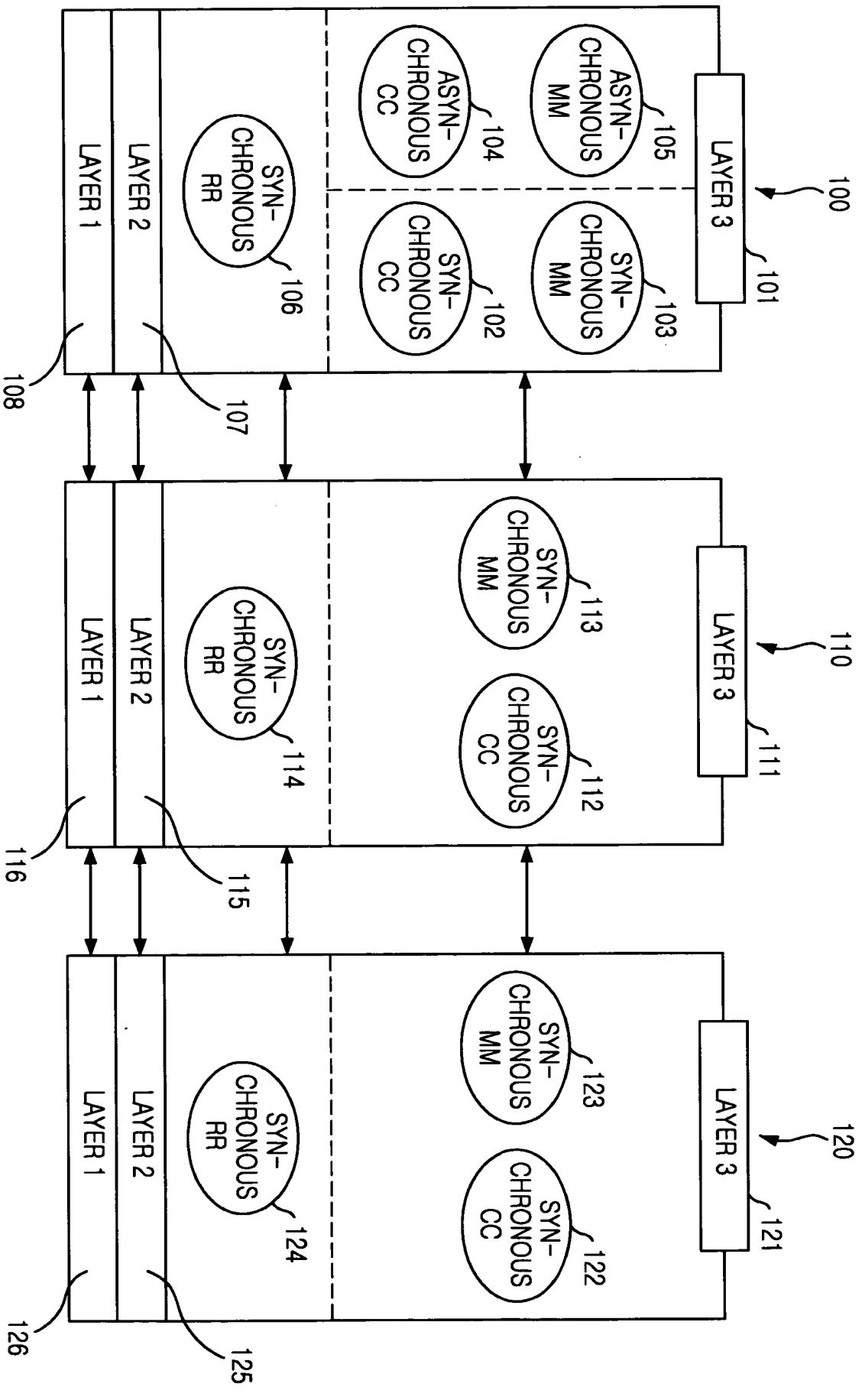


FIG. 4B

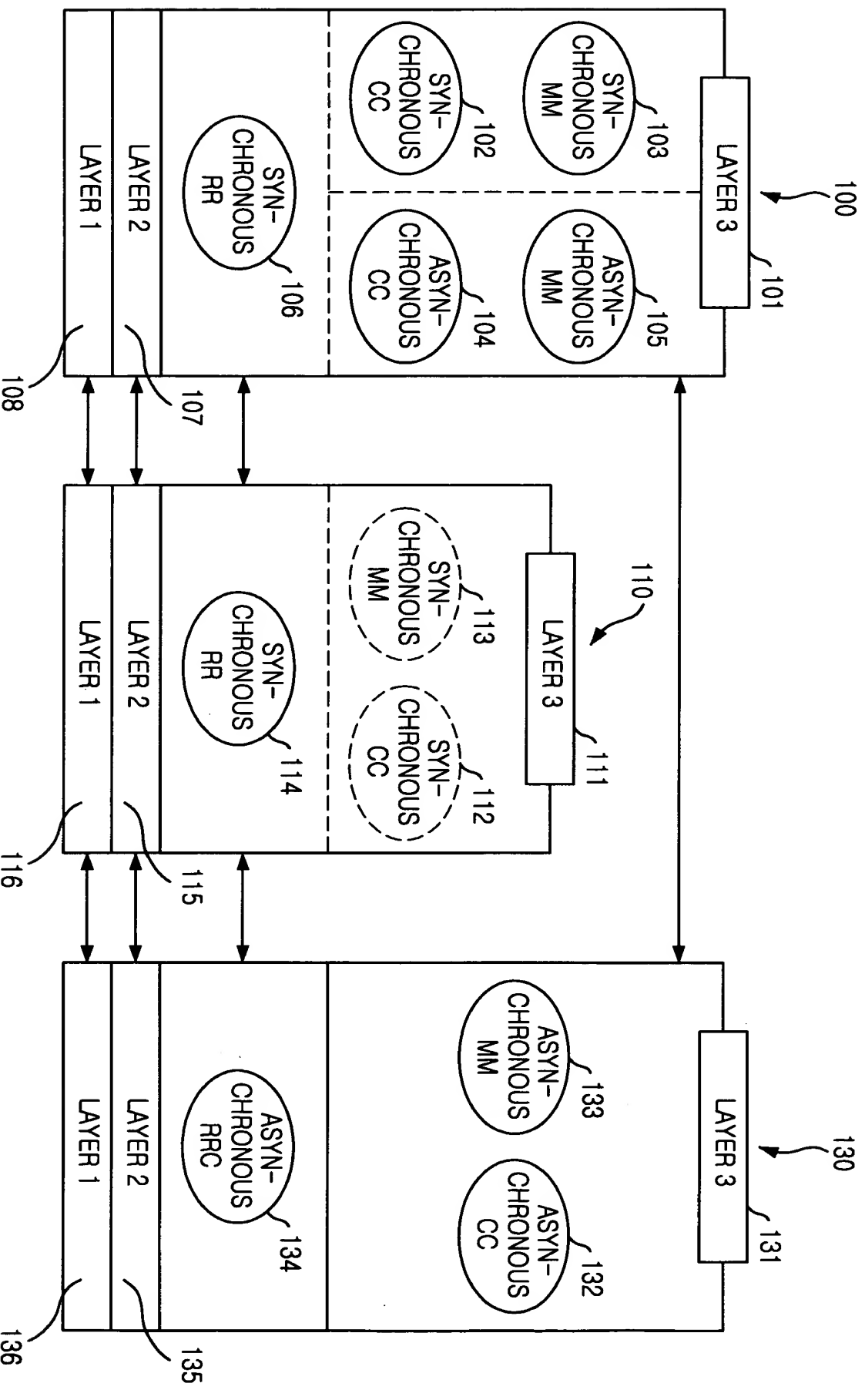


FIG. 4C

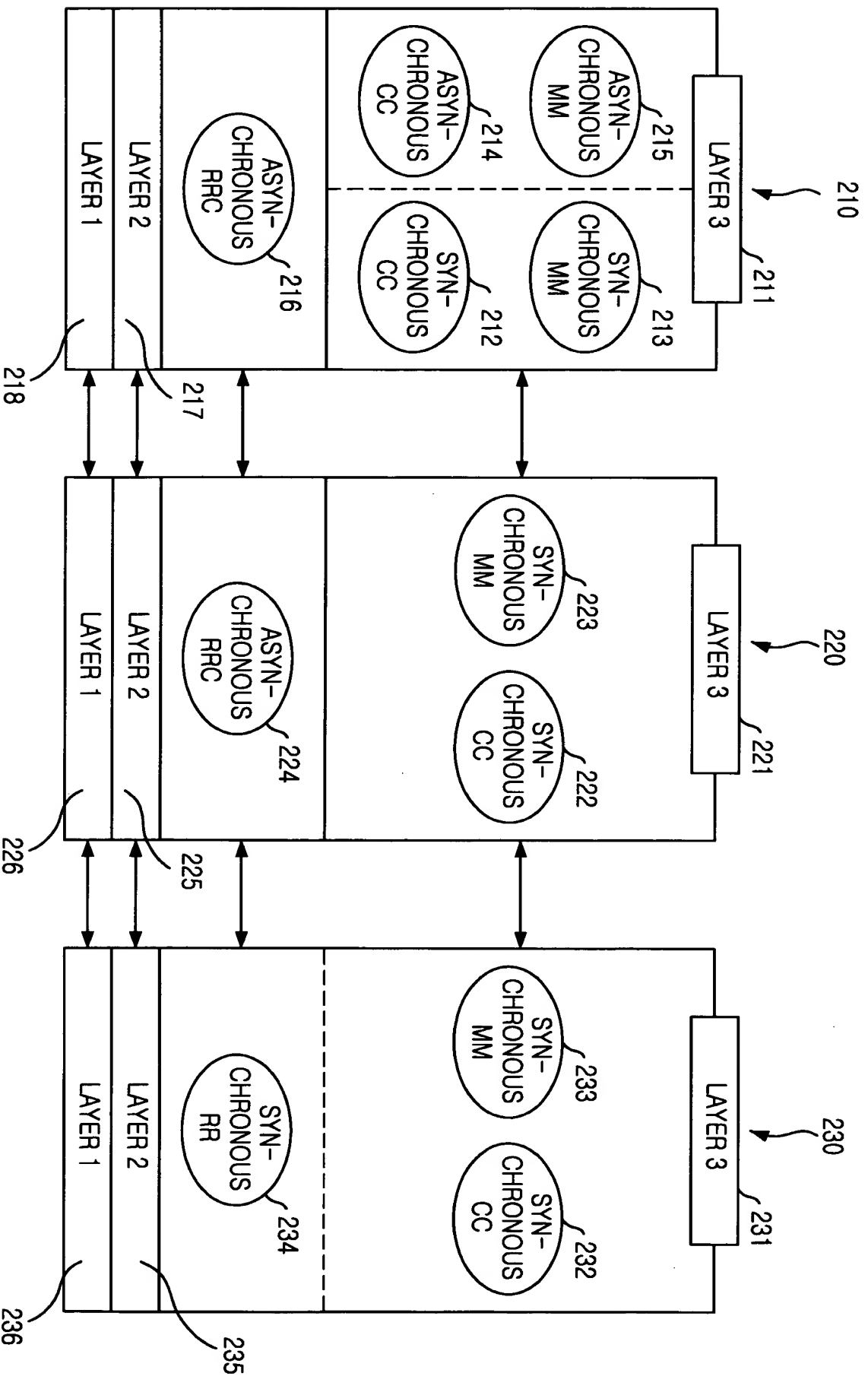


FIG. 4D

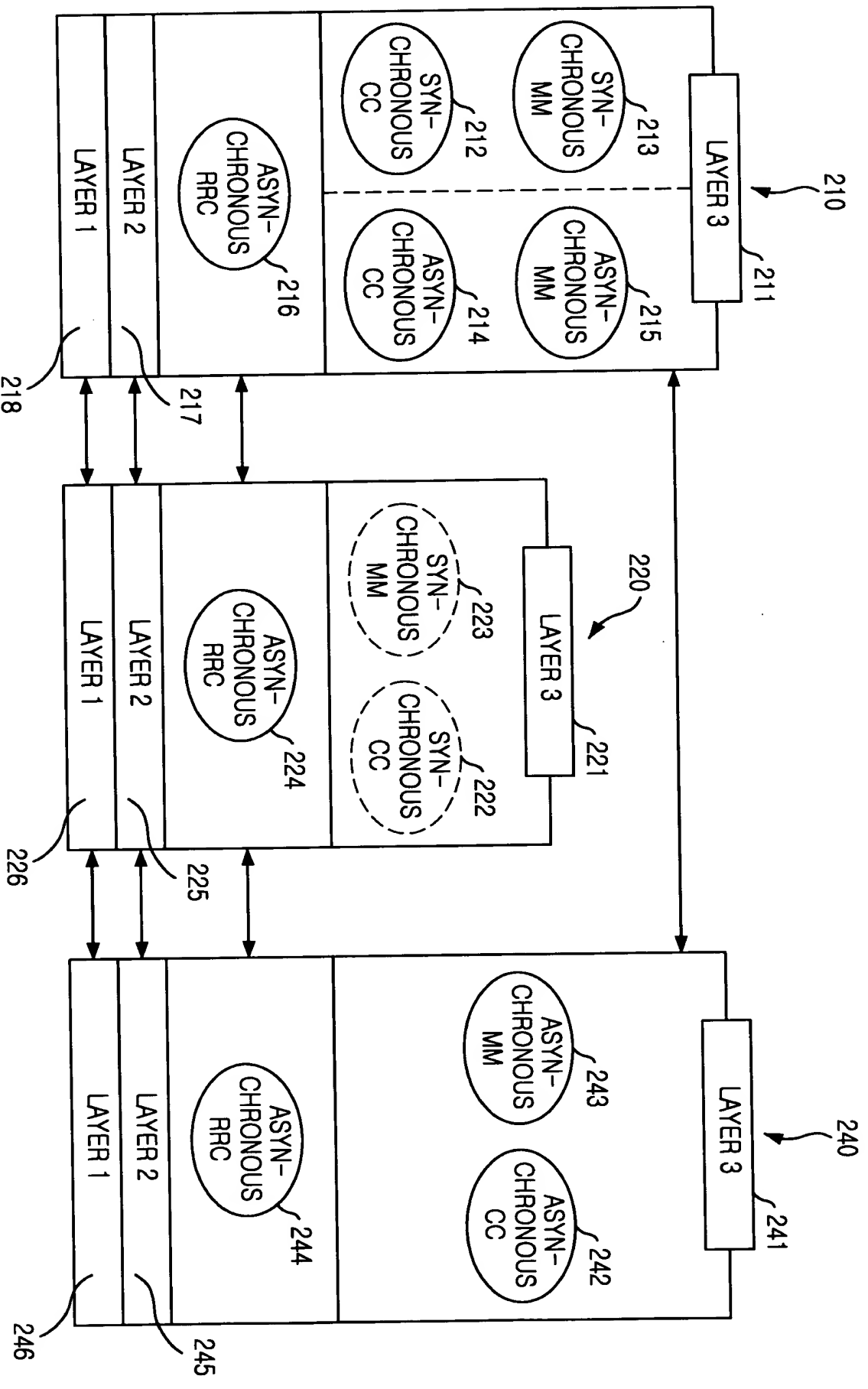


FIG. 5

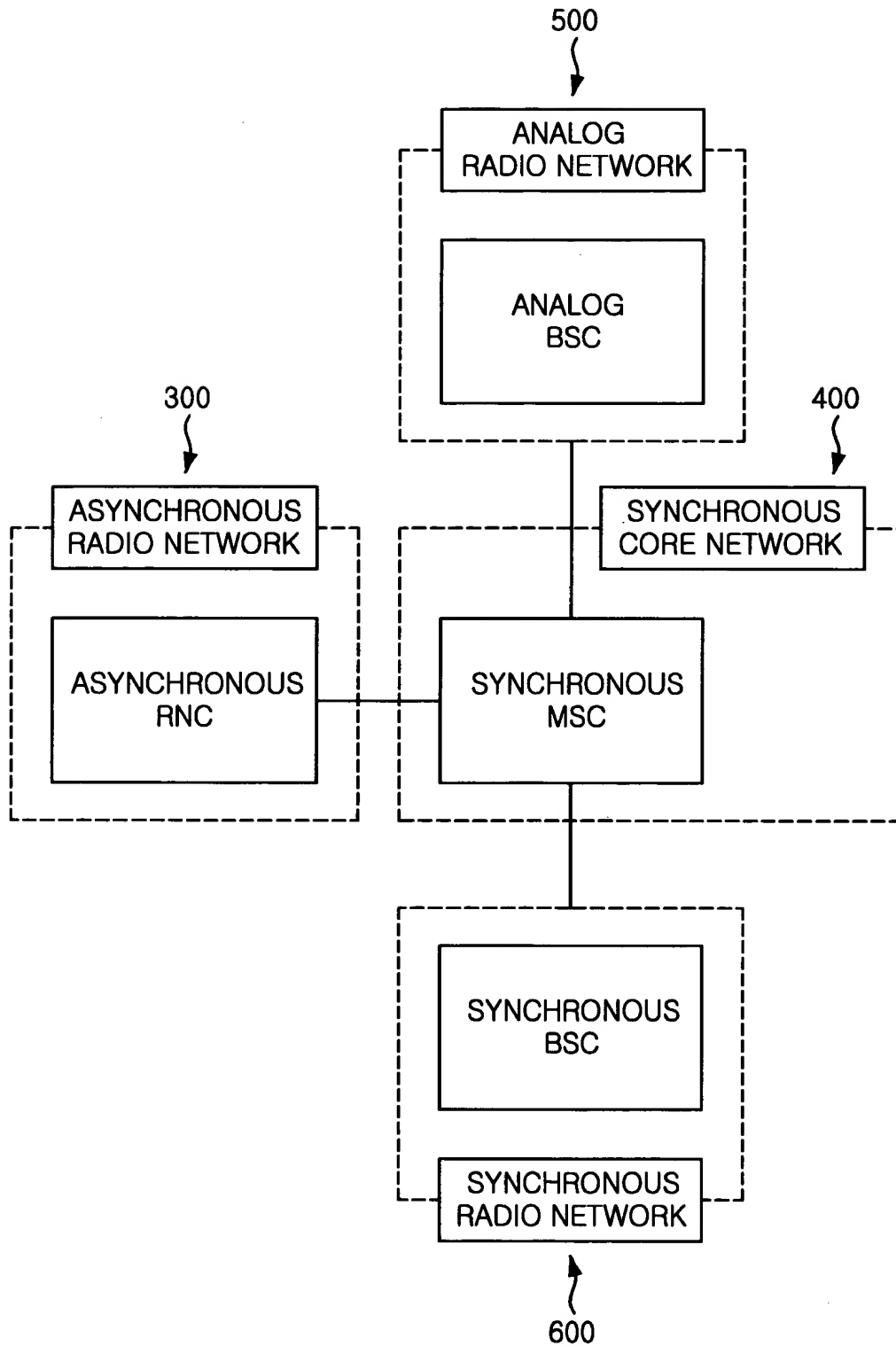


FIG. 6

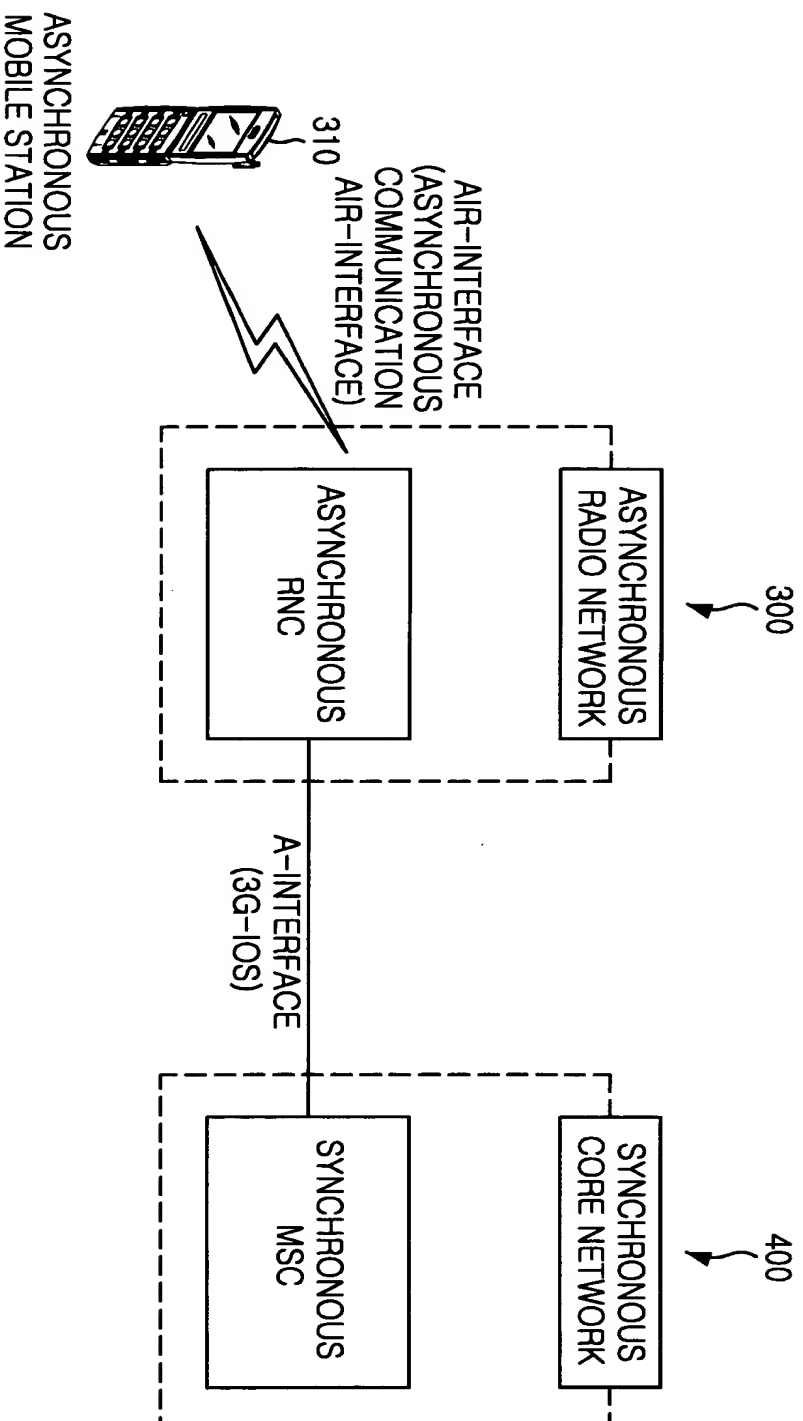


FIG. 7A

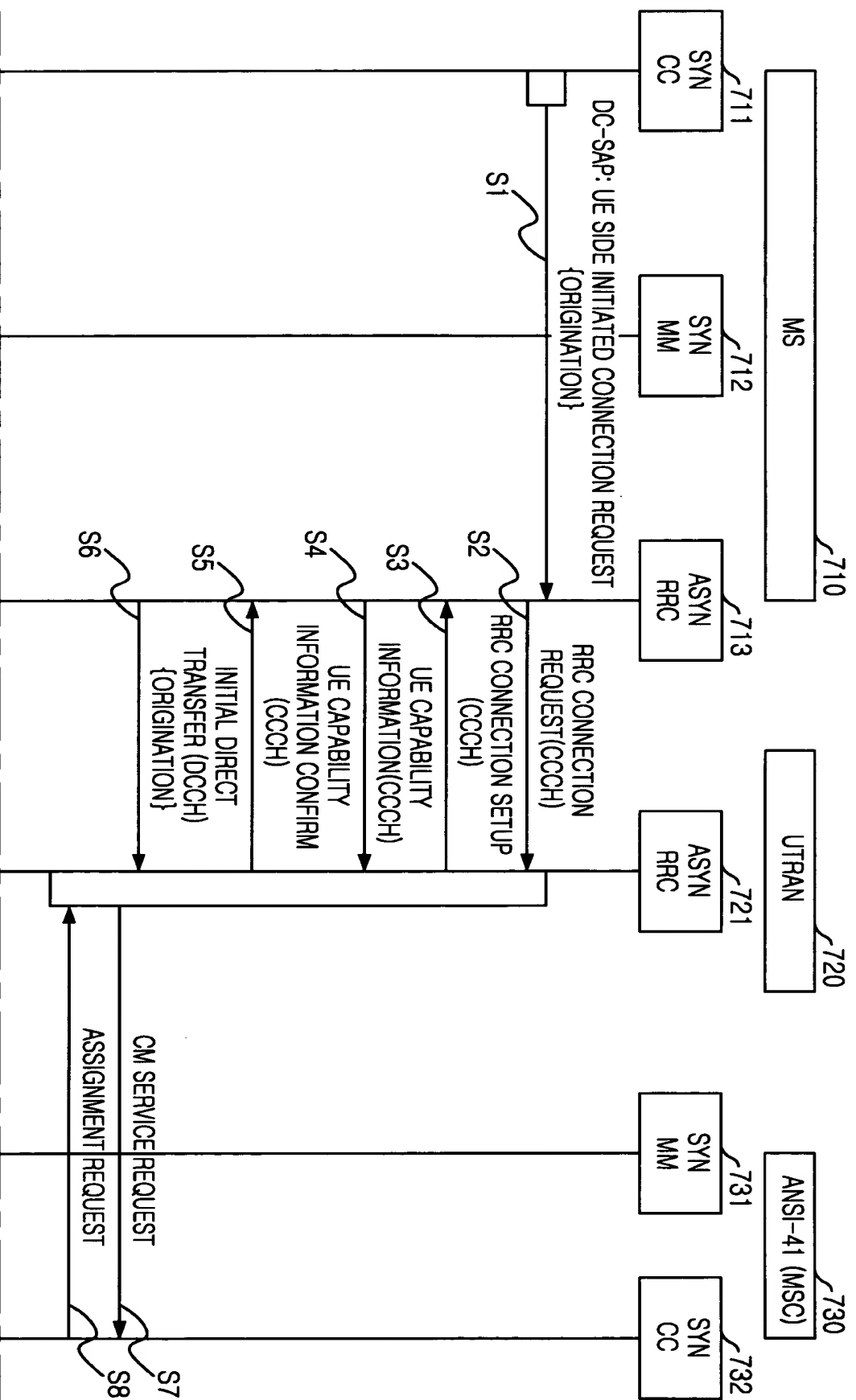


FIG. 7B

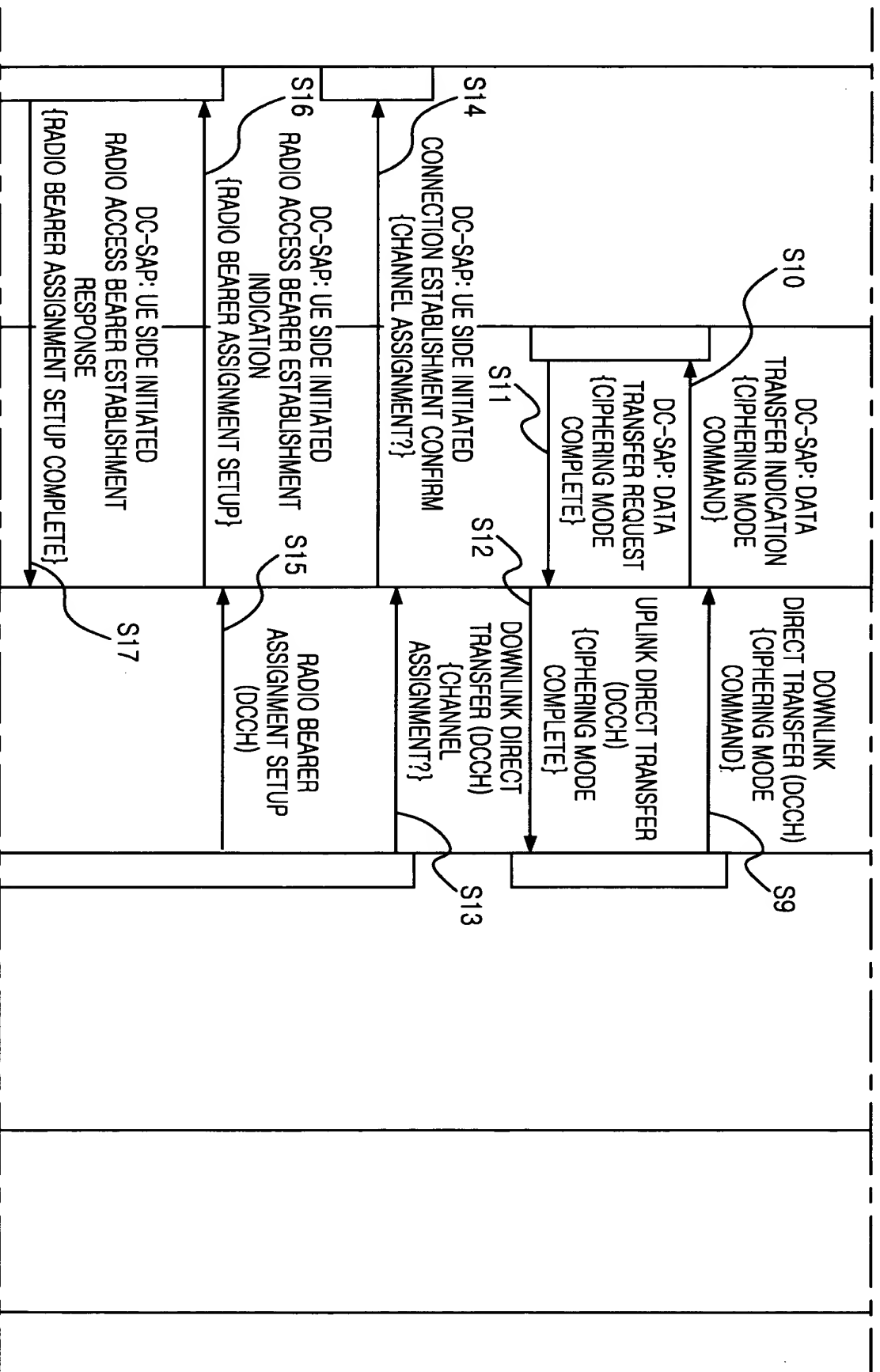


FIG. 7C

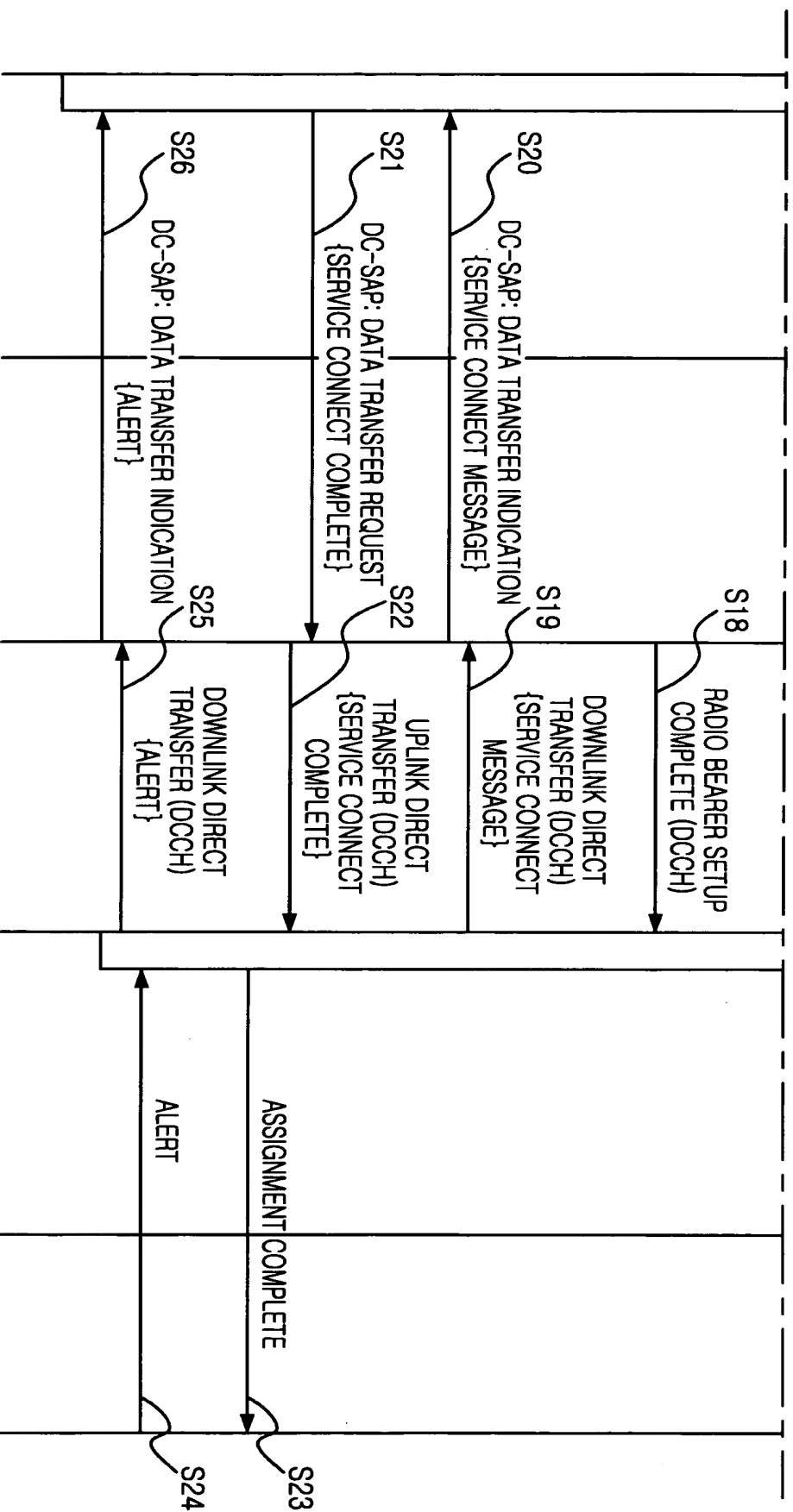


FIG. 8

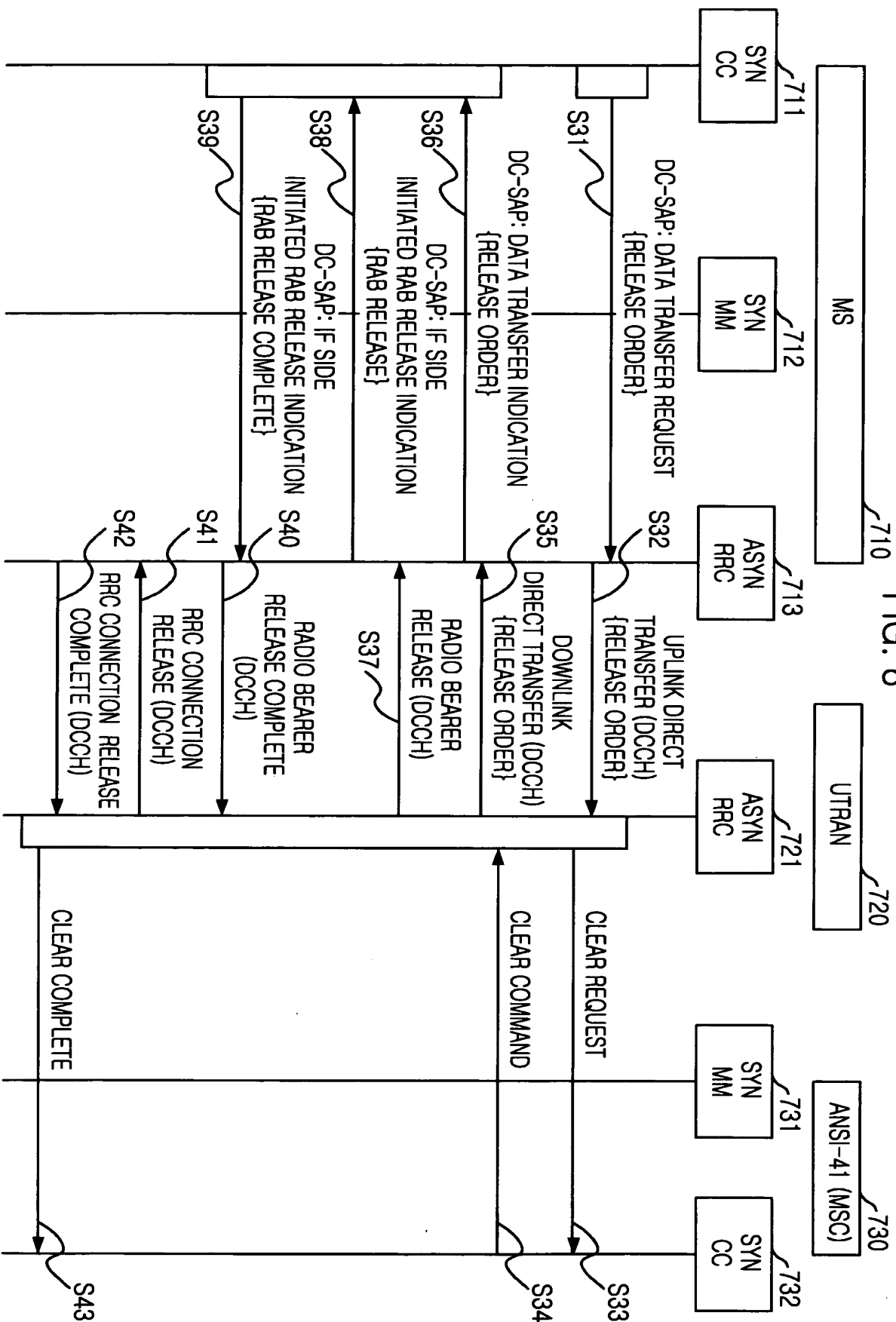


FIG. 9

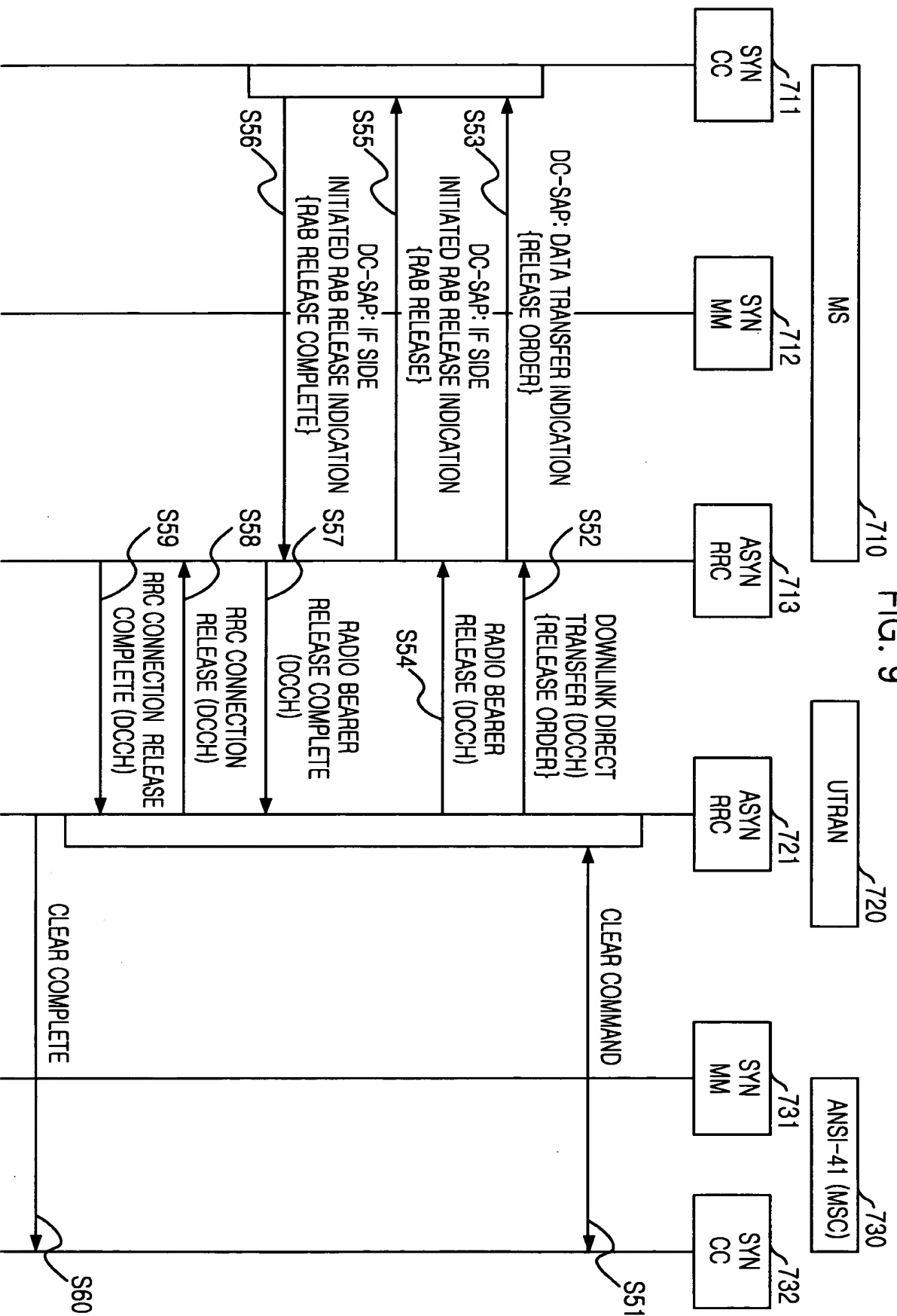


FIG. 10A

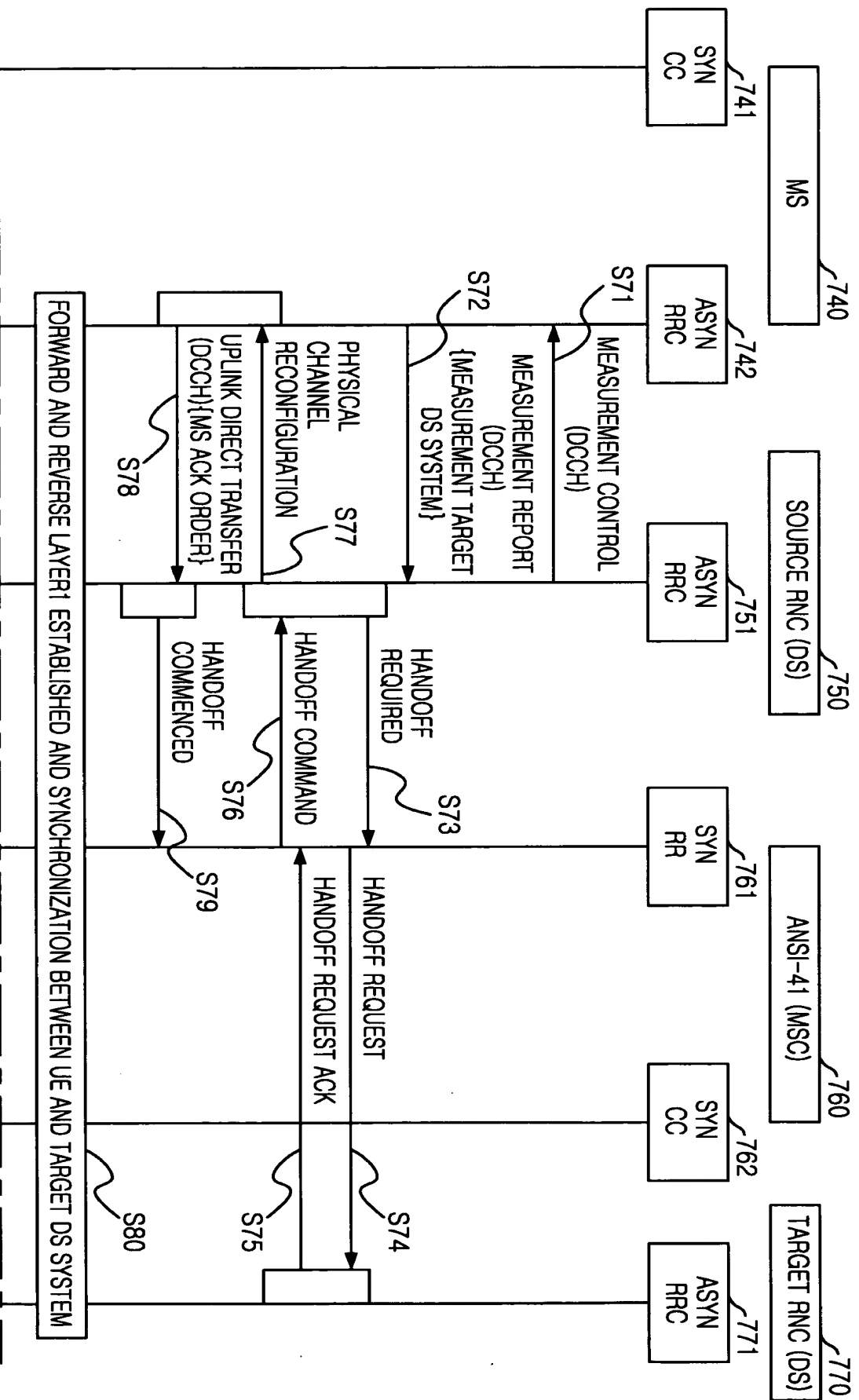


FIG. 10B

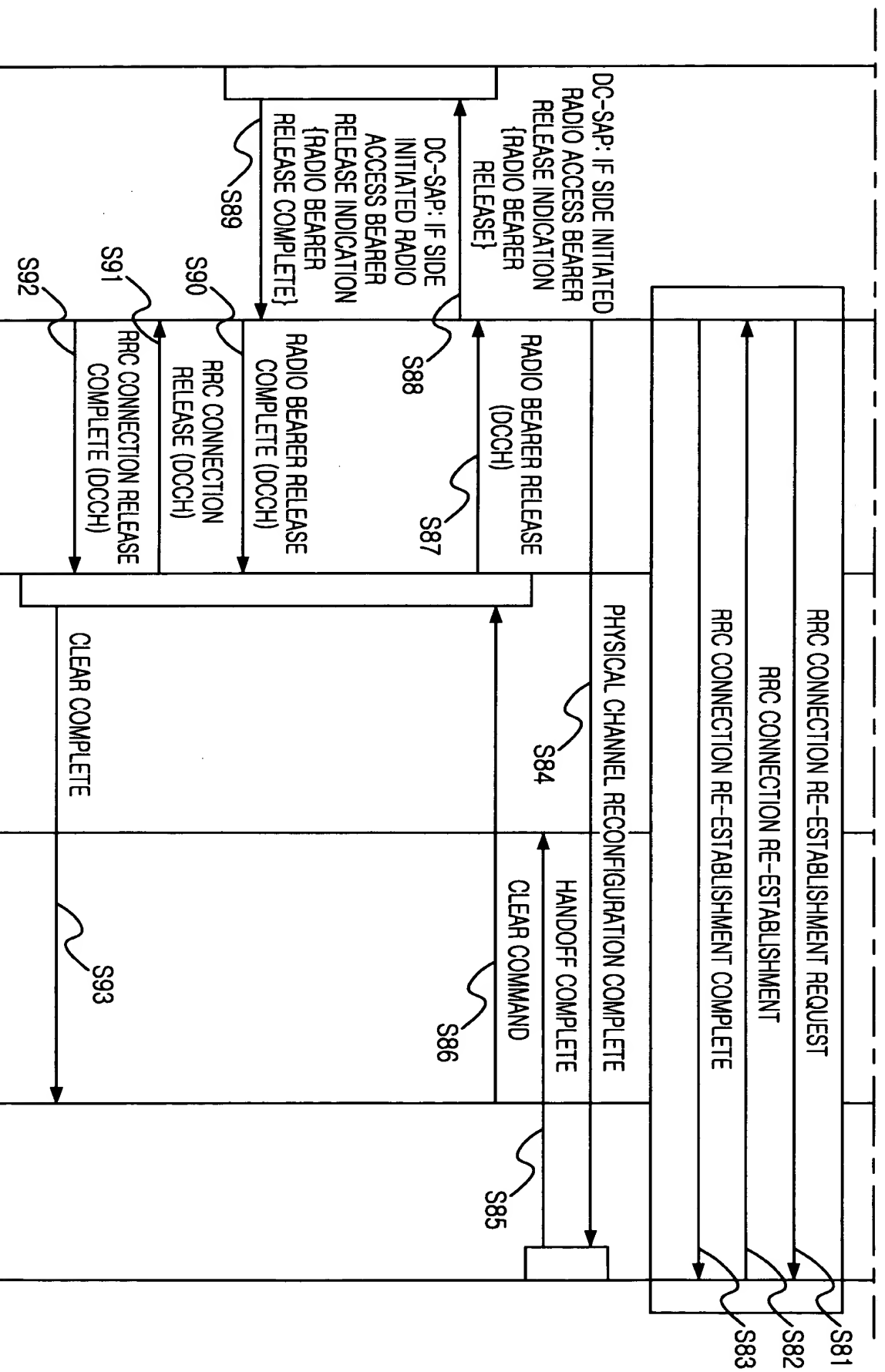


FIG. 11A

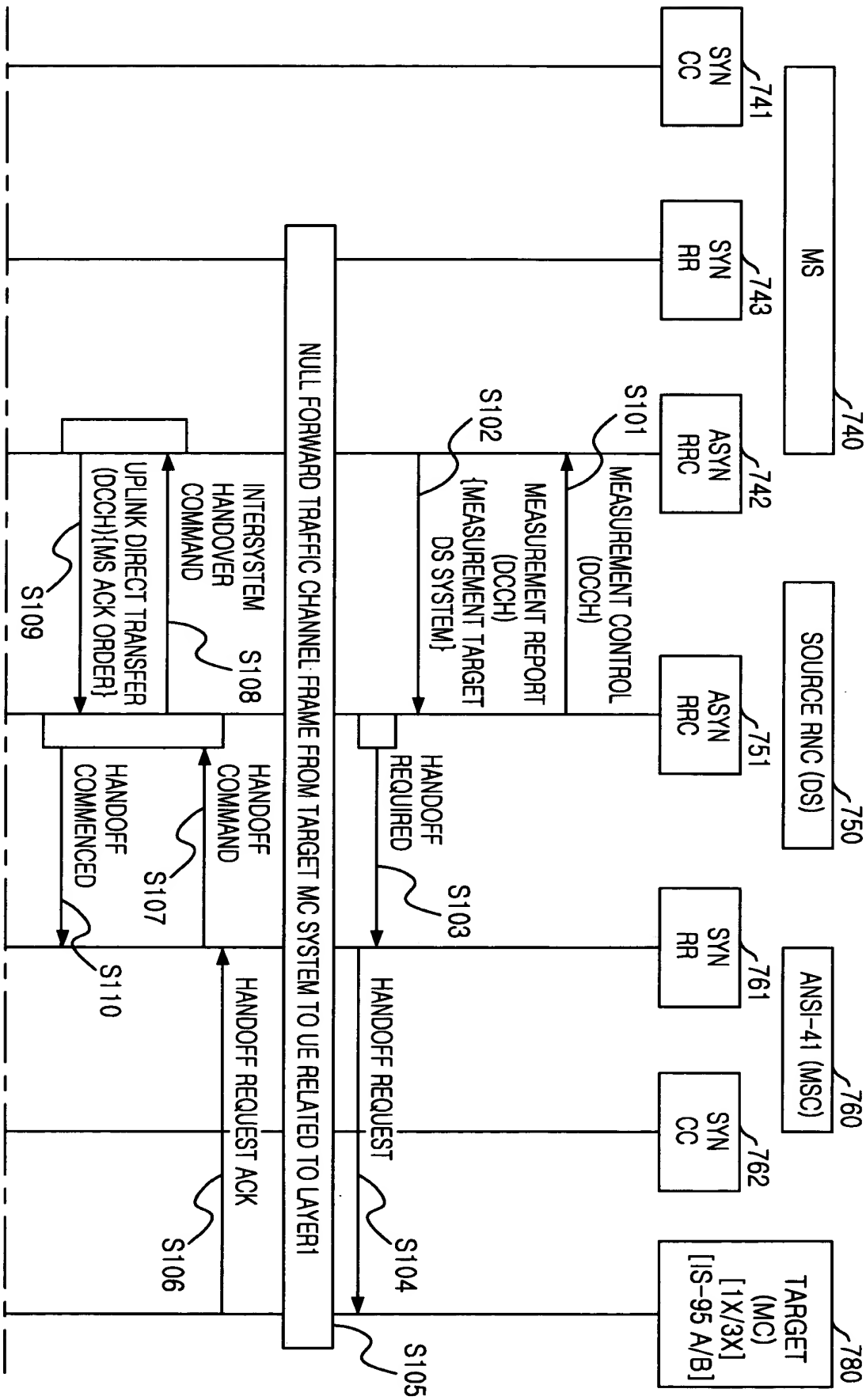


FIG. 11A is a sequence diagram illustrating a handoff process from a target MC system to a UE related layer 1. The process involves the following components and steps:

FIG. 11B

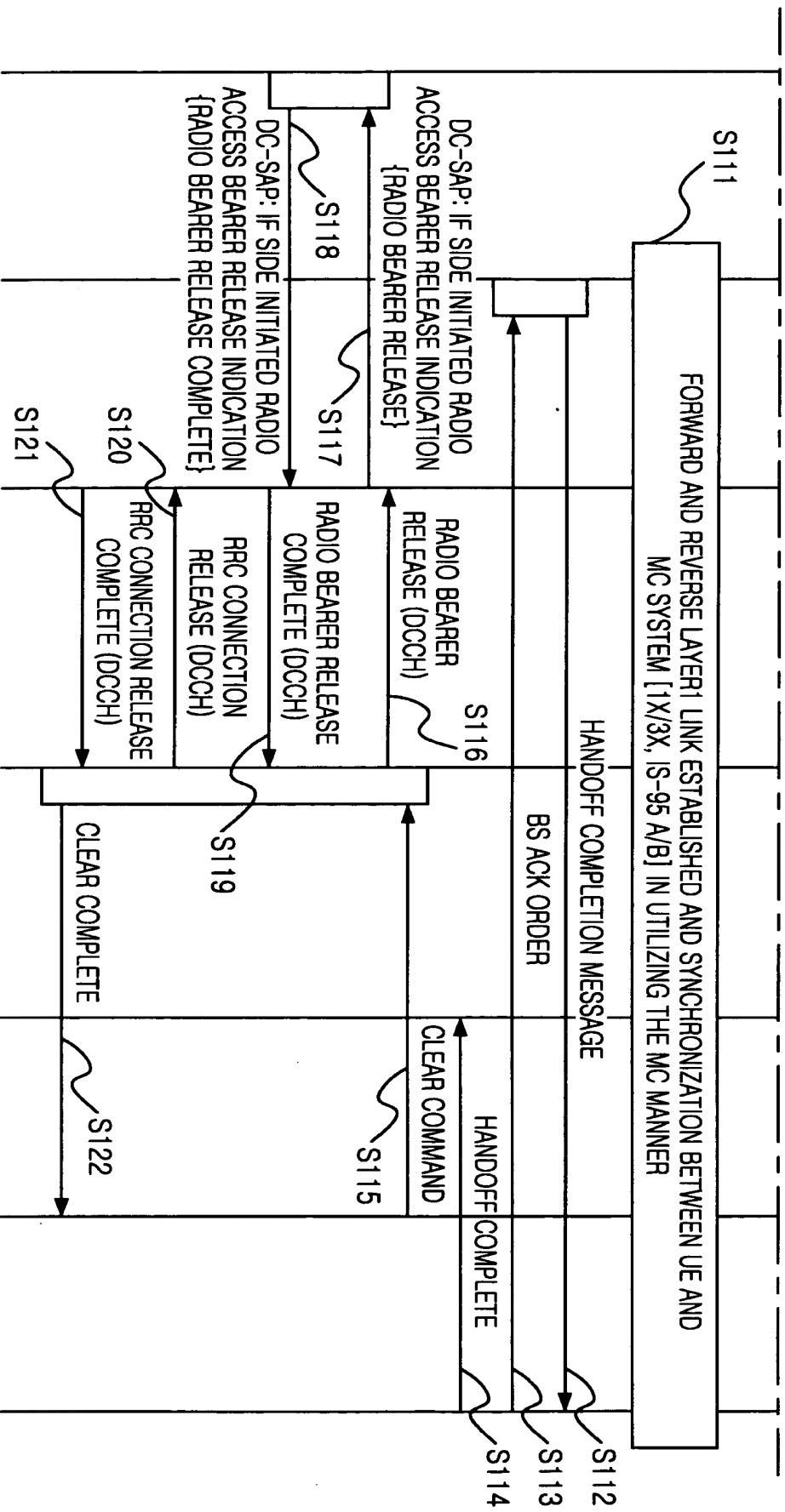


FIG. 12A

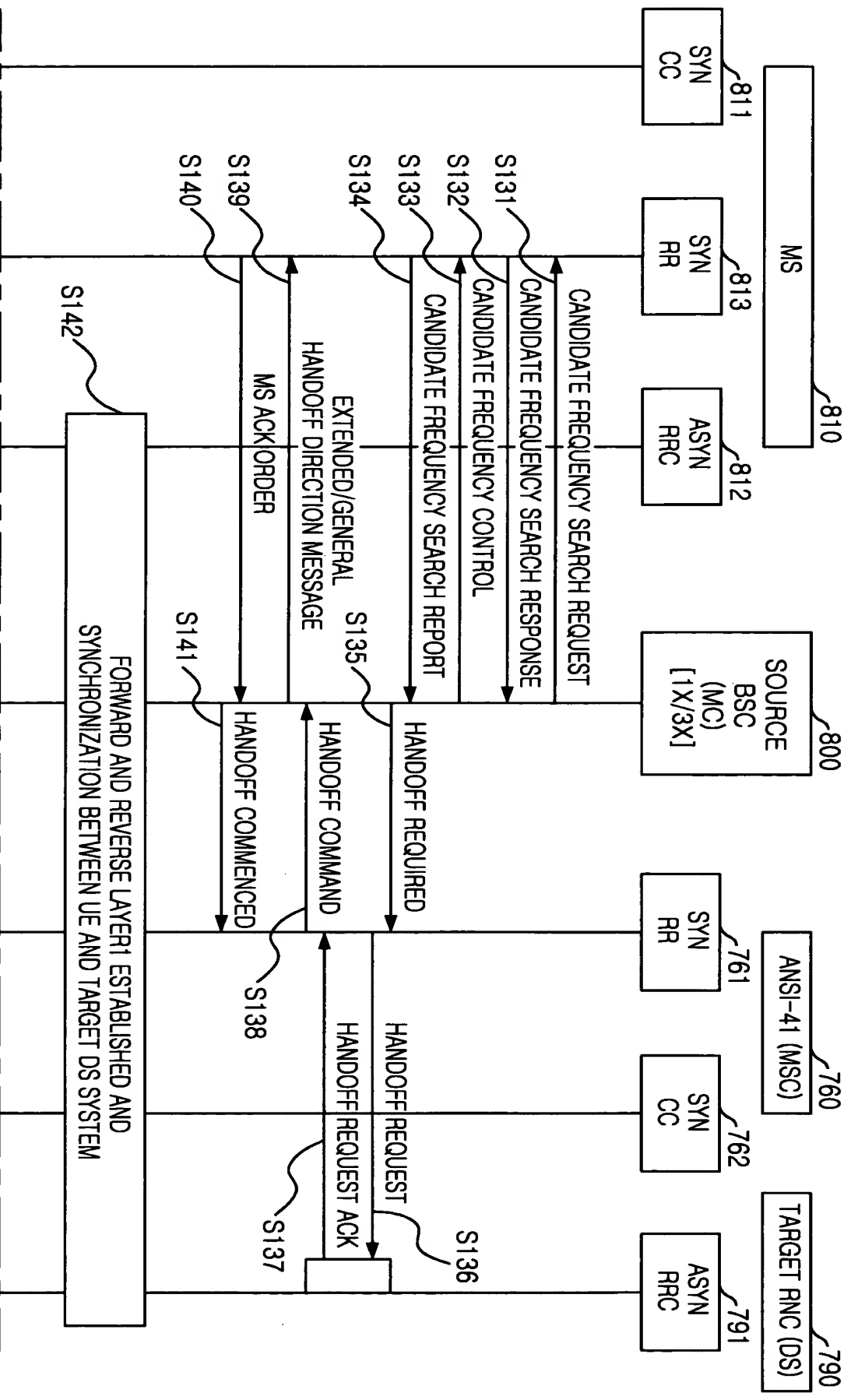


FIG. 12B

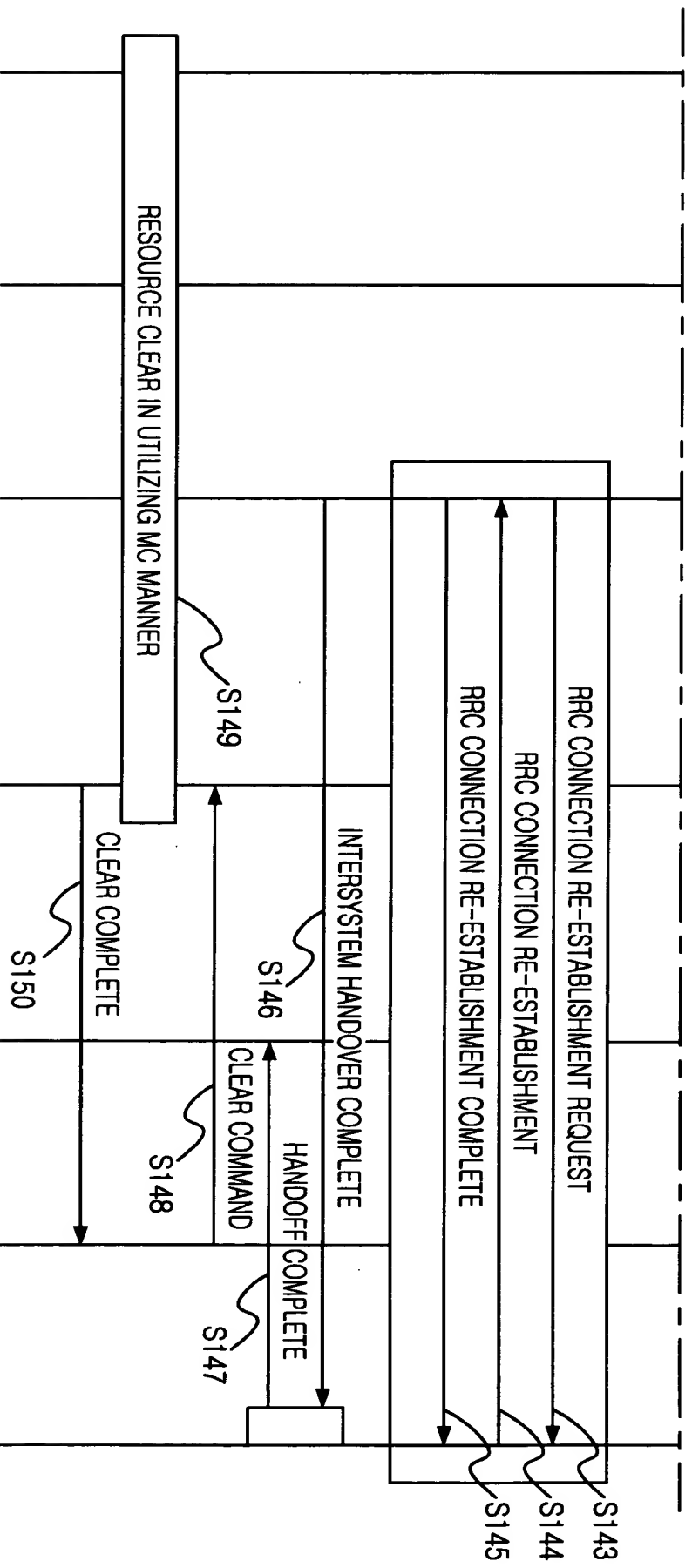


FIG. 13A

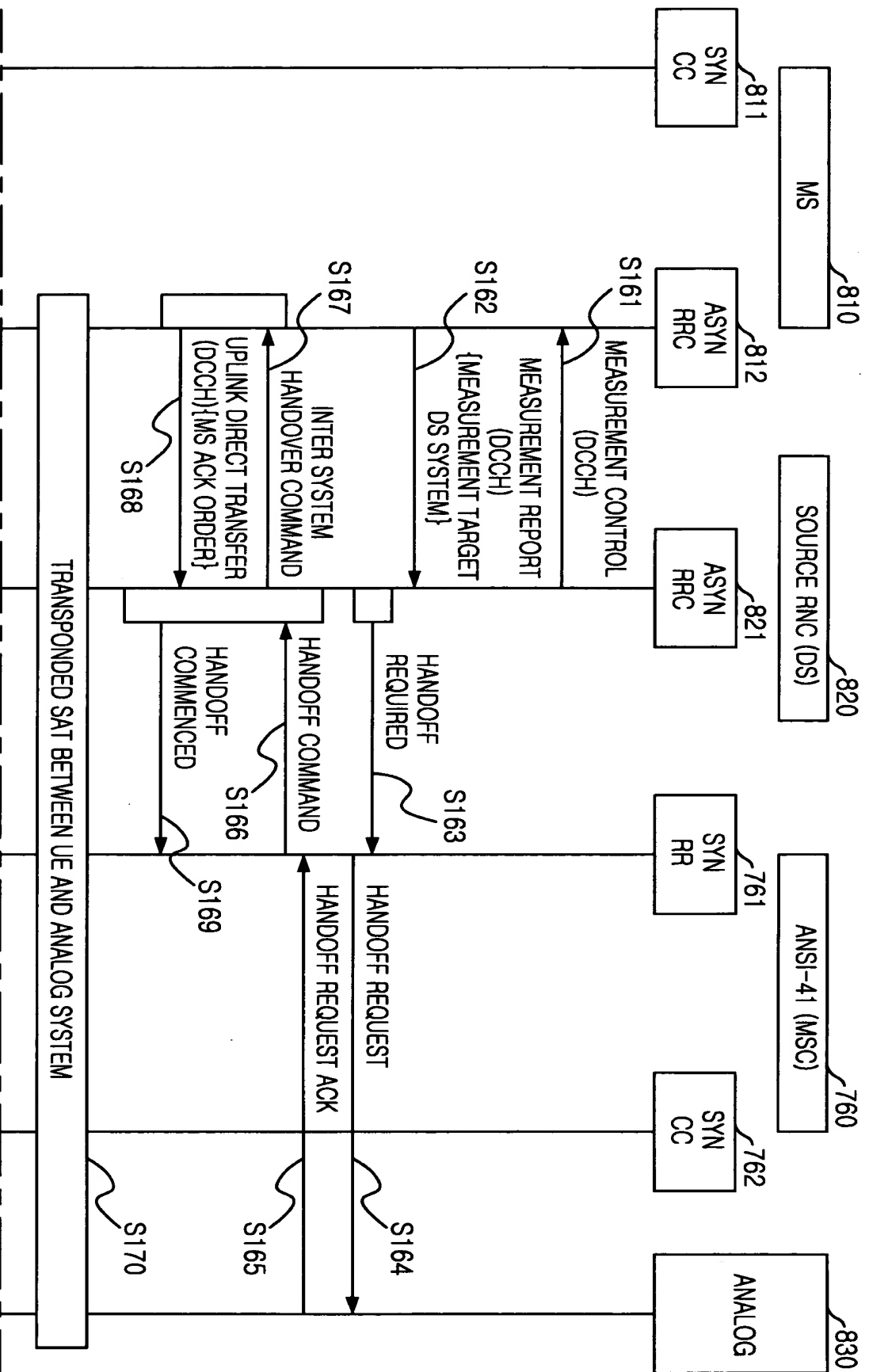


FIG. 13B

